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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Tomoki Ushida

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EXAMINER

HEYI, HENOK G

ART UNIT

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2627

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,770	Applicant(s) USHIDA ET AL.	
	Examiner HENOK G. HEYI	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-14 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>06/13/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed 03/05/2008 have been fully considered but they are not persuasive. Referring to claims 1-4, no patentable weight has been given to the method of manufacturing limitations (i.e., the center holes in the disc-like shaped substrate and the light transmitting layer are formed by forming a circular cut in the light transmitting layer after forming the light transmitting layer on the substrate, and then punching out at least a part of an area inside the circular cut), since "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hisada et al. US 6, 743,527 B2 (Hisada hereinafter).

Regarding claim 1, as the claim is directed to an optical recording medium, *per se*, the method limitations appearing in lines 7-10 of claim 1 can only be accorded weight to the extent that it affect the structure of the completed optical recording medium. Note that “determination of patentability in ‘product-by-process’ claims is based on product itself, even though such claims are limited and defined by process [i.e., the center holes in the disc-like shaped substrate and the light transmitting layer are formed by forming a circular cut in the light transmitting layer after forming the light transmitting layer on the substrate, and then punching out at least a part of an area inside the circular cut, for instance], is still a product claim; it is patentability of the product claimed, and not recited process steps, that must be established, in spite of the fact that claims may recite only process limitations”, *In re Hirao and Sato*, 190 USPQ 685 (CCPA 1976).

Hisada teaches an optical recording medium (Figs. 1B, 2B, 3B, 4B, 5A) comprising: a disc-like shaped substrate (11, 51) including a center hole (A) formed therein and an information recording face (SA) at least on one side of the first substrate (11, 51); and a light transmitting layer (transparent substrate 12), formed on the information recording face so as to be thinner than the substrate 11, the light transmitting layer including a center hole (B). But the formation of the center holes in the disc-like shaped substrate and the light transmitting layer by forming a circular cut in the light transmitting layer after forming the light transmitting layer on the substrate, and then punching out at least a part of an area inside the circular cut is just a method of making the product which doesn't have any patentable weight.

Regarding claim 2, Hisada further teaches an annular protrusion (22) projecting in a thickness direction is formed around the center hole (B) in substrate 12 and the center hole (B) having a larger inner diameter than an outer diameter of the annular protrusion is formed in the light transmitting layer (figure 4B, col.14, lines 4-15 which states that substrate 51 may be in place of first substrate 11. See also col. 6, in the brief description of the substrate 51 that is being used in the optical disk of Hisada's invention).

Regarding claims 3-4, Hisada further teaches the amount of projection of the annular protrusion is approximately equal to or larger than to a thickness of the light-transmitting layer (Figs. 2B, 3B show the projection extends about thickness of the light transmitting layer 12 and also on col 9 line 36 Hisada discloses that the height of the convex portion 22 preferably is larger than the sum of thickness of the second substrate 12 and the radiation curable resin 13). Regarding claim 3, the annular protrusion is said to be approximately equal to the thickness of the light-transmitting layer. Since the term "approximately" is a relative term, even though the protrusion as shown by Hisada is seen to "approximately equal" to the thickness of the light-transmitting layer.

Regarding claim 15, Hisada teaches the optical recording medium (Figs. 1B, 2B, 3B, 4B, 5A) according to claim 1, wherein the center hole (A) formed in the transmitting layer (transparent substrate 12) has a larger inner diameter (dB) than that of the center hole (dA center hole diameter) formed in the first substrate.

Allowable Subject Matter

3. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record considered alone or in combination failed to teach or suggest:

Regarding claim 5, a method for manufacturing an optical recording medium, comprising the combination of steps of:

molding a disc-like shaped substrate including an information recording face at least on one side; a light transmitting layer formation step of forming a light transmitting layer thinner than the substrate on the information recording face; a cutting step of forming a circular cut in the light transmitting layer; and a punching step of punching out at least a part of an area inside the cut by a punching tool to form center holes in the light transmitting layer and the substrate.

Regarding claim 14, a manufacturing device of an optical recording medium, comprising: cutting device for forming a circular cut in a light transmitting layer of a semi finished product of an optical recording medium including a disc-like shaped substrate having an information recording face at least on one side and the light transmitting layer thinner than the substrate on the information recording face; and punching device for punching out at least a part of an area inside the cut by a punching tool to form center holes in the light transmitting layer and the substrate.

Regarding claim 5, Hisada teaches a method for manufacturing an optical recording medium, comprising: a molding step of molding a disc-like shaped substrate including an information recording face at least on one side (the signal area SA of the

first substrate 11 can be obtained, for example, by molding resin by injection molding, col 11 line 1-5); a light transmitting layer formation step of forming a light transmitting layer thinner than the substrate on the information recording face (the second substrate 12 is thinner than the first substrate 11 and transparent , col 8 line 8) but fails to teach a cutting step of forming a circular cut in the light transmitting layer; and a punching step of punching out at least a part of an area inside the cut by a punching tool to form center holes in the light transmitting layer and the substrate. Nakajima discloses that a punch is used to make a center hole in the substrate of disc (and the center through hole 5 is formed therein by moving the punch 18 in a direction of an arrow "a" through the disc substrate 2, col 2 line 14). The combined teaching of Hisada and Nakajima still fail to meet the cutting step used in the manufacturing process.

Regarding claim 14, Hisada teaches an optical recording medium including a disc-like shaped substrate (a first substrate 11, col 7 line 46) having an information recording face at least on one side (the first substrate 11 has a signal area SA on a principal plane 11a, col 7 line 52) and the light transmitting layer thinner than the substrate on the information recording face (the second substrate 12 is thinner than the first substrate 11 and transparent, col 8 line 8). However, Hisada fails to teach a manufacturing device of an optical recording medium, comprising: cutting device for forming a circular cut in a light transmitting layer of a semi finished product of an optical recording medium and punching device for punching out at least a part of an area inside the cut by a punching tool to form center holes in the light transmitting layer and the

substrate. The second reference, Nakajima, teaches about a punching device (punch 18 col 2 line 14) but doesn't teach a cutting device.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENOK G. HEYI whose telephone number is (571)270-1816. The examiner can normally be reached on Monday to Friday 8:30 to 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Henok G Heyi/
Examiner, Art Unit 2627

/William R. Korzuch/
Supervisory Patent Examiner, Art
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